wallflower

# Wallflower 2 User's Guide

S/W Version 2.1

Version 1.0
May 2004

# TABLE OF CONTENTS


## 1 Introduction

What Can Wallflower Do? . . . . . 1-1
Features . . . . . 1-1
Models . . . . . 1-2
What's in this Document? . . . . . 1-2
For More Information . . . . . 1-3

## 2 Basic Features

Getting to Know Your Wallflower . . . . . 2-5
- On/Off, Advance and Enter Buttons . . . . . 2-5
- LCD Control Buttons . . . . . 2-6
- I/O Connectors . . . . . 2-7

Powering On and Off . . . . . 2-8
Installation . . . . . 2-9
- Proper Ventilation! . . . . . 2-9
- Installing the Stands . . . . . 2-9
- Hanging Your Wallflower . . . . . 2-9
- VESA Mount . . . . . 2-9
- Cleaning Your Wallflower . . . . . 2-9
- CleanING Inside the Glass . . . . . 2-9

## 3 Network Setup

Network Setup Methods . . . . . 3-12
Wired Ethernet Configuration . . . . . 3-12
WiFi with Access Point Configuration . . . . . 3-13
WiFi Configuration Without an Access Point (AdHoc/Peer-to-Peer) . . . . . 3-14
- Switching to Ad-hoc Mode . . . . . 3-14
- conecting with windows XP . . . . . 3-14
- COnnecting with mac os x . . . . . 3-15

Alternative Setup Method: Known SSID Mode . . . . . 3-15
Customizing Your Network Settings . . . . . 3-16
Quick Setup for Experienced Network Users . . . . . 3-18
- How the wallflower gets an IP address . . . . . 3-18
- Setting your network preferences . . . . . 3-19

Network Settings in Detail . . . . . 3-19
- Getting to the Network Settings Pages . . . . . 3-19
- ethernet and WiFi IP settings . . . . . 3-19
- WiFi Network Settings . . . . . 3-20

Troubleshooting . . . . . 3-20

## 4 Moving Content to Your Wallflower


Many Ways to Move Your Stuff . . . . . 4-23
Setting Up Drag-and-Drop Transfer . . . . . 4-24
Windows XP Setup . . . . . 4-24
Mac OS X Setup . . . . . 4-28
Changing the Workgroup Name . . . . . 4-31
Changing File Server Security . . . . . 4-31
Using Secure Copy Protocol . . . . . 4-31
SCP and Windows XP . . . . . 4-32
SCP and Mac OS X . . . . . 4-32
Using USB Devices . . . . . 4-32


## 5 Media Playback


Supported Formats . . . . . 5-33
Independent Mode Playback . . . . . 5-34
INDEPENDENT Playlists . . . . . 5-34
Independent Mode Playback Algorithm . . . . . 5-34
Scrited Mode Playback . . . . . 5-35
Script Syntax . . . . . 5-35
Albums . . . . . 5-37
Creating Albums . . . . . 5-37
Enabling/Disabling Albums . . . . . 5-37
Controlling Playback Time (“Flip Time”) . . . . . 5-39
Setting On/Off Time . . . . . 5-40
Screen Orientation and Resizing . . . . . 5-40
Automatic Resizing . . . . . 5-40
AutomAtic Centering . . . . . 5-41
Portrait Mode . . . . . 5-41
Titles . . . . . 5-41
MP3 Artist/Title . . . . . 5-42
Image Titles . . . . . 5-42
Notes on Video Performance . . . . . 5-42


## 6 Internet Features


Web Download . . . . . 6-45
Entering URLs to Download . . . . . 6-45
Selecting Unique Filenames . . . . . 6-46
Redirected Download . . . . . 6-46
Selecting Download Period . . . . . 6-47
Sites Using Authentication . . . . . 6-47
Error Reporting . . . . . 6-47
Email Overview . . . . . 6-47
Receiving Email . . . . . 6-47

IMAP/POP3 Protocols . . . . . 6-47
Basic Information You'll Need for Setup . . . . . 6-47
Deleting Email After Download . . . . . 6-48
Security Phrase . . . . . 6-48
Viruses . . . . . 6-48
Error Reporting . . . . . 6-48
Sending Email . . . . . 6-48
Email Out Album . . . . . 6-48
Setting Up Outgoing Email . . . . . 6-48
Scrolling News Feeds (RSS) . . . . . 6-49

## 7 Other Features and Settings

Advance/Enter Buttons . . . . . 7-51
Displaying System Status . . . . . 7-51
Security Settings . . . . . 7-52
Security Overview Page . . . . . 7-52
Web Interface Security . . . . . 7-52
File Server Security . . . . . 7-53
Maintenance Pages . . . . . 7-54
Maintenance Tasks . . . . . 7-54
Software Upgrades . . . . . 7-55
Log Files . . . . . 7-55
Advanced Maintenance Functions . . . . . 7-56
Remote Control and Advanced Scripting . . . . . 7-56

# 1 Introduction

## Features, Models and How to Use this Document

Thank you for your purchase of a Wallflower 2 Multimedia Display System. This document describes the setup and operation of your Wallflower. Additional information can also be found on-line at:

www.wallflower-systems.com/docs.

### What Can Wallflower Do?

At its simplest, your Wallflower is a stand-alone multimedia display system that can show movies, still images and play audio. Your movies, pictures and audio (what we call "content" in this document) can be anything from family photos to advertising messages.

Content can get to the Wallflower manually through the drag and drop interface or it can be "fetched" from the Internet through email or web download. In the following chapters, you'll learn how to set up and use your Wallflower.

### Features

- 14.1 inch TFT LCD screen
  - 1024x768 resolution
  - Supports 16.7 Million Colors
- 30 Gbyte media storage
- MP3 Jukebox functions

- MPEG, AVI and QuickTime Video playback support
- Built in speaker
- USB jump drive support
- Support for 10/100 Ethernet in addition to WiFi
- Internet file sharing via our *Pollinate*™ technology.
- Configurable control buttons
- Top quality construction materials
  - Frames and enclosures made from real wood, metal and glass
- LCD screen protected by tempered glass
  - Keeps fingerprints, etc. off the LCD panel
  - Clean with simple household glass cleaner
- All common Operating Systems supported
  - Windows 98/ME/NT/2000/XP
  - Apple OS X all versions (OS9 not supported)
  - All Linux variants
- No software installation needed on any platform

## Models

Wallflower 2 comes in three feature levels shown in the table below.

| Model | Network Features |
|---|---|
| Value | Ethernet Only<br>[No Internal Wifi] |
| Standard | Ethernet<br>Built-In Wifi |

## What's in this Document?

The Wallflower 2 User's Guide contains information about the following aspects of Wallflower 2 operation:

- Installation: Where to put your Wallflower, how to mount it, etc.
- Network Setup: How to get your Wallflower configured for your network. Those with advanced networking knowledge may wish to skip the step-by-step directions and just go the the "Just the Facts" section in Network Setup.
- Basic Operation: How to perform all the basic tasks of a Wallflower.
- Advanced Operation: Using advanced features such as file sharing.

## For More Information

Always check our website for the most up-to-date information and software downloads:

www.wallflower-systems.com

# 2 Basic Features

## Buttons, Connectors, Stand Installation and Wall Mounting

In this chapter we'll cover the basic hardware features of your Wallflower including installation and button and connector usage.

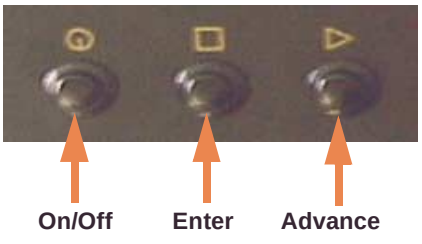
## Getting to Know Your Wallflower

Your Wallflower has two sets of buttons on the top edge of the system as shown in Figure 1. The three left buttons control power off/on and image/sound features. The right buttons control the LCD display. Each group are described below.

### ON/OFF, ADVANCE AND ENTER BUTTONS

The three buttons on the left side of the Wallflower's top edge are (in order): Power On/Off, Advance Selection ("Advance") and Enter Selection ("Enter").

FIGURE 1. **On/Off, Advance and Enter Buttons**



- **Power On/Off:** This button controls power to your Wallflower. To turn on your Wallflower simply depress the button for about one second. To turn off your Wallflower, simply press and release this button for less than 2 seconds. ***If you hold the button down for 4 or more seconds you will force a "hard" turn-off which will cause subsequent restarts to take up to 8 minutes (we force a hard drive check after a hard off event).***
- **Advance:** This button is used to advance though choices in on-screen menus. During normal operation it is used to control volume (or other user-programmable functions).
- **Enter:** This button selects choices in on-screen menus. During normal operation it is used to control volume (or other user-programmable functions).

## LCD CONTROL BUTTONS

The LCD Control Buttons are located on the right side of the top edge of the Wallflower. A variety of settings can be changed including brightness/contrast, color temperature and screen geometry.

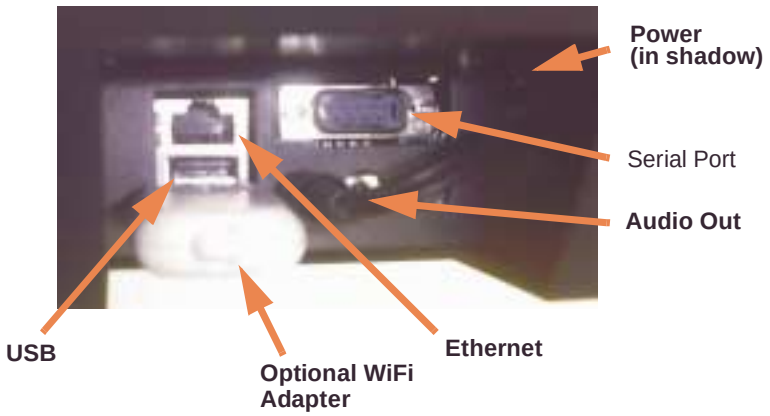
**FIGURE 2. LCD Control Buttons**

**FIGURE 3. On-Screen LCD Control Menu**

## I/O CONNECTORS

Your Wallflower 2 includes several I/O connectors along the bottom of the frame as shown in the figure, below.

FIGURE 4. **I/O Connectors**




- **Power**: 2.1mm barrel power connector. Your Wallflower power supply delivers up to 5 A at 12V DC (60W) though the system uses considerably less. Please be advised that if you attempt to use your own 12V power extension, that voltage drop over long runs can cause your unit to malfunction.
- **USB (2):** The USB open port is used primarily to attach Mass Storage compatible Flash card readers and cameras. Other peripherals may be supported. The USB port can also be used to attach a USB keyboard for diagnostic functions. If you ordered a Wallflower 2 with WiFi support, the WiFi adapter is installed into one of these two ports.
- **Audio Out:** The green 3.5mm stereo jack. This connector is used to connect external speakers or an external amplifier to your Wallflower. To connect to a stereo, use a 3.5mm-to-dual-RCA cable set. Normally, the Wallflower's internal amplifier and speaker are connected. If you wish to use external speakers, simply unplug the internal connector and replace with your own.
- **Line In (behind wire in photo):** The red 3.5mm stereo jack. This connector is not currently used.
- **Mic In (behind wire in photo:** The blue 3.5mm stereo jack. This connector is not currently used.
- **Ethernet:** RJ45 jack. This jack is used to connect 10/100Mbps Ethernet to your system.
- **Serial Port:** Not currently used.

## Powering On and Off

Your Wallflower is powered off and on via the On/Off button on the top of the system. A single short press turns it on, a single short press turns it off. Holding the on/off button down will force an immediate power off and **THIS IS NOT SOMETHING YOU SHOULD DO!**

Your Wallflower has an internal hard drive and like all hard drives, it is sensitive to having power unexpectedly removed. While we have taken great lengths to prevent damage to the hard drive when this happens, it is also important that you, as the user, not do anything that could damage your system.

**Here are the things you should never do:**

1. Never shut off your Wallflower by just unplugging it (or hooking it to a timer). This will, over time corrupt your harddrive (see below).
2. Never (never, ever!) pull the power while the Wallflower is starting up and the progress bar is hovering below the 50% point. At this point in start-up, the Wallflower is repairing the disk due to some previous problem (probably caused by a power failure). Yanking the power now will probably damage the drive beyond what it can repair itself. Disk repair can take up to 30 minutes (but usually less than 5).
3. Never-ever-never-ever-ever repeatedly cycle power on/off/on/off while the system is starting up. This is actually worse than #2, above.
4. Never run with scissors. This is just good advice and is not directly related to your Wallflower.

## Installation

Your Wallflower may be used with its included stand (“feet”) or hung on a wall.

**PROPER VENTILATION!**

***NOTE:*** *Your Wallflower requires proper air-flow/ventilation. NEVER block the airflow perforations in the case and NEVER operate your Wallflower for an extended period of time (more than 5 minutes) laying on its back.*

**INSTALLING THE STANDS**

Your Wallflower 2 comes with two metal feet, and screws and double stick table to attach them. Remove the protective tape on the double-stick tape then attach with the provided screws. You can use the feet in either protrait or landscape orientation.

**HANGING YOUR WALLFLOWER**

Your Wallflower includes keyhole style hanging holes on the rear enclosure. Use “molly” type screws to affix to the wall.

**NOTE: DO NOT allow the screwheads to penetrate more than 1/8” into the Wallflower’s rear enclosure to avoid damaging internal components.**

**VESA MOUNT**

Your Wallflower can also be wall-mounted via an optional VESA mount adapter. Please visit our website for more information.

**CLEANING YOUR WALLFLOWER**

The casing of your Wallflower Plus can be cleaned and treated just like any other wooden furniture, with a spray polish, to keep it in good condition and free of fingerprints. The glass can be cleaned with window cleaner and a soft cloth.

**CLEANING INSIDE THE GLASS**

If dirt accummulates inside the front bezel glass, simply remove the four screws holding on the bezel, clean the inside glass then replace.

You can clean the LCD with a soft cloth or special purpose LCD cleaning cloth. Do not use harsh cleansers on the LCD (doing so will void your warranty).
5.

# 3 Network Setup

## WiFi, Ethernet and IP Configuration

This chapter describes in detail how to configure the networking operation of your Wallflower 2 for both the Ethernet and Wireless Ethernet (WiFi) ports. Please refer the QuickStart Guide if you just want to get connected as quickly as possible.

**NOTE FOR NETWORKING BEGINNERS:** If you are new to IP networks, please read one of the many fine tutorials available on the Internet. Search from Google for "networking tutorial".

**NOTE FOR ADVANCED USERS:** If you are experienced in setting up IP and WiFi networks, you may wish to skip most of this chapter and go to the "Quick Setup" section at the end of this chapter.

## Network Setup Methods

There are several methods to set up networking on your Wallflower as shown in the table below.

| Method | Choose this Method If... | What You'll Need |
|---|---|---|
| Wired Ethernet | • You are using a wired Ethernet network<br>• You are unable to temporarily disable encryption on your WiFi network<br>• You are having trouble with the WiFi setup methods | • Ethernet crossover cable (usually orange) or,<br>• Regular Ethernet cable and Ethernet hub<br>• A PC or Mac |
| WiFi with Access Point | • You are using an Access Point based WiFi network where you *can* temporarily disable encryption | • Access Point<br>• A PC or Mac with WiFi |
| WiFi without Access Point (peer-to-peer/ Adoc) | • You want to make a direct connection between a PC/Mac with a WiFi adapter and your Wallflowe | • A PC or Mac with WiFi |

## Wired Ethernet Configuration

If you start your Wallflower connected to a wired Ethernet network, the WiFi port will be automatically disabled. The Wallflower will attempt to use DHCP to assign its IP address. If there is no DHCP on your Ethernet network, then the Wallflower will self-assign the IP address 192.168.0.240.

1. Either through a hub/switch or a crossover cable, connect your Wallflower's Ethernet port to the same network as your PC/Mac.
2. Power up your Wallflower and watch the screen to see what IP address is displayed at the end of the boot sequence (see Fingure NNN, below).
3. If the Wallflower was able to get an IP address via DHCP, you can skip to Section NNN, Customizing Your Network Settings.
4. If your Wallflower fails to get an address via DHCP, it will self assign 192.168.0.240. Configure your PC/Macs network to be 192.168.0.0 with a netmask of 255.255.255.0. Your PC's IP address will need to be between 192.168.0.2 and 192.168.0.239. You may need to reconfigure your router/ gateway to match this address range. Please see Appendix A: Configuring Your PC or Macs Networking Settings if you need help with this step.
5. Now proceed to "Customizing Your Network Settings", below.

**FIGURE 1. IP Address Display During Boot**

## *WiFi with Access Point Configuration*

To configure your Wallflower using your Access Point based WiFi network, follow these steps:

1. Temporarily disable WEP encryption on your WiFi network if it is enabled. Please refer to your Access Point documentation if you need help with this step.
2. Enable DHCP on your WiFi network if it is not already enabled. Please refer to your Access Point and/or Router documentation if you need help with this step.
3. Turn your Wallflower on and watch the screen as it boots. At the end of the boot sequence, you should see a valid IP address as shown in Figure 1, above. If your Wallflower is not able to connect to your network, or can not get an IP address via DHCP it will self-assign the IP address 192.168.0.140 (netmask 255.255.255.0).
4. If your Wallflower was able to connect to your WiFi network and get an IP address, you can skip to “Customizing Your Network Settings”, below.
5. If your Wallflower fails to get an address via DHCP, please check your encryption and DHCP settings and try again. If this still fails, it could be due to 2.4GHz interference or insufficient single strength. We then recommend you use either Ethernet configuration (above) or Peer-to-Peer configuration (below). If these methods do not work, or cannot be used, please see the Troubleshooting section at the end of this chapter for other methods.

## WiFi Configuration Without an Access Point (AdHoc/Peer-to-Peer)

Ad-hoc mode- also called peer-to-peer mode- can be used to connect to your Wallflower directly from a PC/Mac with a WiFi card without going through an Access Point. In general, setup is easier with an Access Point since the Wallflower can usually detect the network settings automatically (assuming you've followed the QuickStart Guide for your operating system). If you do not have an Access Point and wish to use Ad-hoc mode, read on.

**SWITCHING TO AD-HOC MODE**

1. Reboot your Wallflower by cycling power.
2. Your Wallflower will go through its normal boot sequence, possibly including searching for an Access Point to connect to. After you see the "Files" icon, a countdown sequence will begin that says "Normal Operation will Begin in 9 Seconds...", etc. As soon as you see this countdown, click once on the left control button ("Advance" button).
3. A menu will now appear with 3 choices:
   - Restore original network settings
   - Force Wallflower into Access Point Mode on network "Wallflower"
   - Force Wallflower into Ad-hoc Mode on network "Wallflower-Adhoc"

   Select the last choice: Ad-hoc Mode and click the right ("Select") button. Then press the left button until you get to "Exit and Restart" then select by clicking the right button. Your system will restart (be patient, this can take a minute or so.)
4. Your Wallflower will now reboot. When it comes back up, your Wallflower will be on peer-to-peer WiFi network “Wallflower-AdHoc” with IP address 192.168.0.140 (netmask 255.255.255.0).

You can now connect to your Wallflower from your Windows XP PC (see the next step for directions).

**CONECTING WITH WINDOWS XP**

In this section we assume you have some familiarity with configuring your WiFi card. Directions:

1. Open your network connection settings for your WiFi card by clicking: Start->Network Connections->Show All Connections
2. Double click your WiFi connection icon, then choose Properties.
3. Click on the tab "Wireless Networks". You should see the Ad-Hoc network "Wallflower-Adhoc" in the menu of available networks (if you do not see it, click on Advanced and make sure that your system is configured to "see" Ad-hoc networks). Select the "Wallflower-Adhoc" network and click Configure. Make sure that all encryption/WEP checkboxes are unchecked and that the peer-to-peer checkbox is checked. Then click OK.
4. In the lower box ("Preferred Networks"), select "Wallflower-Adhoc" and move it to the top position. This forces your PC to connect to this network first. Do NOT click OK. Click on the General tab.

5. On the General screen, select TCP/IP then select "Use the Following IP Address". Select an IP address in the range 192.168.0.2-139 (192.168.0.10, for example) with a netmask of 255.255.255.0. Now click OK. The DNS settings aren't important.
6. Close the properties box to get back to "Network Connections". Right click on your WiFi connection and click "Repair". This forces your PC to reset it's IP address.
7. Check your connection by pointing your web browser to 192.168.0.140. You should get the Wallflower Configuration Menu. If not, recheck your steps above.
8. If your PC was able to connect to your Wallflower network please proceed to “Customizing Your Network Settings”, below.

**CONNECTING WITH MAC OS X**

In this section we assume you have some familiarity with configuring your WiFi card. Directions:

1. Click on the WiFi signal icon on the right hand side of the Finder title bar to bring up a pulldown list of available networks. Select "Wallflower-Adhoc" under "Computer-to-Computer" networks.
2. You may need to configure your network location to set a static IP address. Choose and IP address in the range 192.168.0.2 to 192.168.0.139.
3. Check your connection by pointing your web browser to 192.168.0.140. You should get the Wallflower Configuration Menu. If not, recheck your steps above.
4. If your PC was able to connect to your Wallflower network please proceed to “Customizing Your Network Settings”, below.

## *Alternative Setup Method: Known SSID Mode*

Known SSID Mode can be used with when you are having difficulty connecting to an Access Point based network and cannot use Ethernet configuration. Directions:

1. Change your WiFi access point's ESSID (sometimes called SSID or WiFi Network Name) to "Wallflower".
2. Turn off WEP encryption.
3. Set your local network IP addresses to be in the range 192.168.0.1 to 192.168.0.255. This usually means your access point's IP address will change to 192.168.0.1 (if it is a combined AP/gateway). You must also turn off DHCP.
4. Don't forget to change your PC/Mac's WiFi settings to match.
5. Reboot your Wallflower by cycling power.
6. Your Wallflower will go through its normal boot sequence, possibly including searching for an Access Point to connect to. After you see the "Files" icon, a countdown sequence will begin that says "Normal Operation will Begin in 9 Seconds...", etc. As soon as you see this countdown, click once on the left control button.

A menu will now appear with 3 choices:

- Restore original network settings
- Force Wallflower into Access Point Mode on network "Wallflower"
- Force Wallflower into Ad-hoc Mode on network "Wallflower-Adhoc"

Select the second choice: Known SSID Mode and click the right ("Select") button. Then press the left button until you get to "Exit and Restart" then select by clicking the right button. Your system will restart (be patient, this can take a minute or so.)

7. Your Wallflower will now reboot. When it comes back up, it will be at IP address 192.168.0.140 on WiFi network "Wallflower". You may need to cycle power again.
8. You can now connect to your Wallflower from your PC/Mac by pointing your browser at 192.168.0.140. Now you can reconfigure the Wallflower for your specific network as shown below.

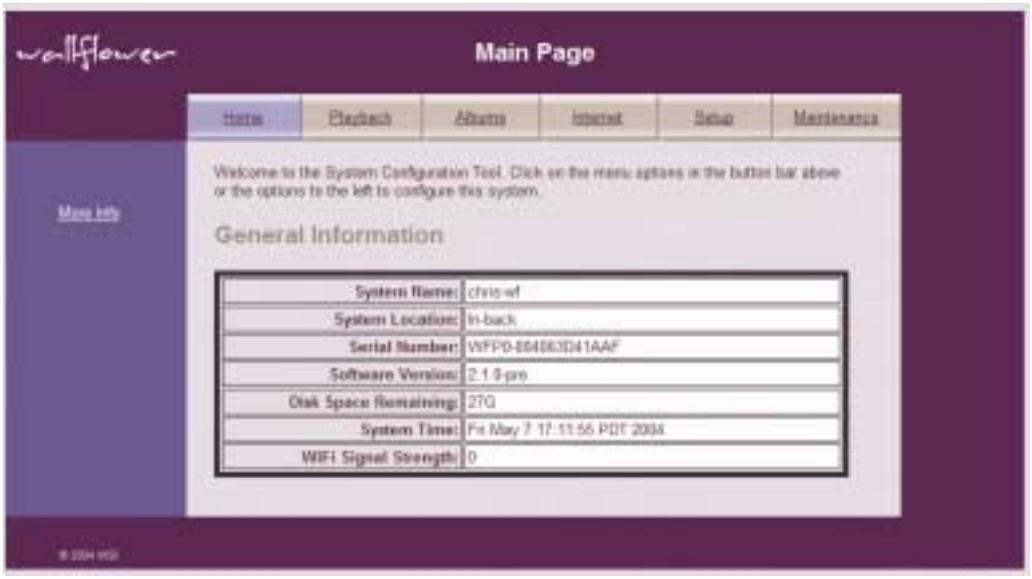
## *Customizing Your Network Settings*

You should now be able to "talk" to your Wallflower. Try the following:

1. In Internet Explorer or Safari (Mac users), enter the IP address of your Wallflower. For example, if your Wallflower told you its IP address was 192.168.0.5, type the following in your browser:

```
http://192.168.0.5
```

You should see the main Wallflower configuration screen (it may look different than the example below). Poke around to see what you can change. Just don't change any network or WiFi settings yet!




2. We recommend the following settings:

- **Static IP Address (instead of Automatic/DHCP).** This will make it easier for Windows XP and Mac OS X to find your Wallflower every time you want to use it. Use an IP address "out of the way" of your DHCP server's range.For example, if your DHCP server is assigning addresses between 192.168.0.20 and 192.168.0.30, you should pick a static address of 192.168.0.31.
- **Select a Specific SSID.** On the WiFi setup pages, choose your specific SSID in order to prevent your Wallflower from attaching to other networks unexpectedly.

  **NOTE**: Your SSID cannot contain spaces or other non-alphanumeric characters (for example “&”, “?”, “*” etc.).

- **Turn On Encryption.** This has nothing to do with the Wallflower, it just makes good security sense. You don't want your neighbors poking around in your computers, do you?

  **NOTE**: Your Wallflower supports 40-bit and 128-bit hexadecimal passwords *only*. If your network is using “passphrase”, you will need to switch to hexadecimal.

- **Make the Changes Stick:** When you've got the network the way you want it, restart your Wallflower from the "Other Options" menu (bottom-most button). Don't forget to make sure your access point and PC's match the new setings. You will need to restart your Wallflower for the new network/WiFi settings to take effect.

## Quick Setup for Experienced Network Users

In this section, we'll tell you how to configure the standard WiFi and Ethernet settings as quickly as possible. We'll assume you have a bit of practice installing and configuring networking devices such as routers, PCs, etc.

**HOW THE WALLFLOWER GETS AN IP ADDRESS**

On both the Ethernet and WiFi, the first thing the Wallflower does out-of-the-box is attempt to assign an IP address via DHCP.

**Ethernet Operation.** If the Ethernet is plugged in and there is a link on the Ethernet port, the WiFi will be disabled. The Wallflower will attempt to use DHCP to get an IP address. If DHCP fails, the Wallflower will self-assign 192.168.0.240 (netmask 255.255.255.0).

**WiFi Operation.** If the Ethernet is not plugged in (or has no link), and your model has WiFi installed (Standard and Multimedia Editions, or Value Editions with an approved WiFi adapter installed) then your Wallflower will attempt to get an IP address through DHCP on the strongest unencrypted network[1] it finds. If DHCP is unsuccessful, the Wallflower will self-assign 192.168.0.140 (netmask 255.255.255.0).

**SETTING YOUR NETWORK PREFERENCES**

Once your Wallflower has an assigned IP address, simply point your web browser at the assigned IP address. See the previous section for further details.

## Network Settings in Detail

**GETTING TO THE NETWORK SETTINGS PAGES**

The Network Settings pages can be reached by pointing your browser at the main configuration page, then clicking on the side menu button labeled “Network Settings”

**ETHERNET AND WIFI IP SETTINGS**

The Ethernet and WiFi IP settings control the IP address for your Wallflower’s Ethernet or WiFi port.

NOTE: When the Ethernet port is active (has a link) the WiFi network is disabled.

The following settings are available on the IP configuration pages:

- **DHCP/Automatic or Static IP:** Select DHCP if your Ethernet network is set up to provide IP address information automatically and you want to use this capability. Select Static if you want to manually assign IP address information (see below).

If you select Static IP Mode, you must fill in the following fields:

- **IP Address:** The IP Address for your Wallflower. This address must be on the same IP network as your PC/Mac and router.
- **Netmask:** The network mask for your IP network. The netmask must be the same as that used by other PCs and the router on your network. Typical values are 255.255.255.0 and 255.255.0.0.
- **Gateway/Router:** This is the IP address of your local router. It is typically (but not always) the first IP address on your network. For example, if your PCs IP address is 192.168.1.23 the router is very likely at IP address 192.168.1.1. You can find the router address by looking at your PC’s or Mac’s IP settings.
- **DNS Servers:** This is the IP address of your Domain Name Servers (DNS servers translate names like www.cnn.com into IP addresses). This address is sometimes the same as your router (especially on small networks).

1. This can be a bit confusing. What this means is the Wallflower will connect to the strongest WiFi signal it sees that gives it an IP address. In some cases, encrypted networks will still give out an IP address to unencrypted clients. Of course, your Wallflower won’t be able to use this network even tough it has an address! In these situations, we recommend using the Ethernet port to get set up, then switch to WiFi.

**WIFI NETWORK SETTINGS**

The following settings are available on the WiFi Network Settings Page:

- **Connect to Specific Network/Connect to Strongest Signal:** When connect to strongest signal is selected, the Wallflower will ignore the SSID of local Access Points and simply connect to the strongest signal.

  **NOTE**: We DO NOT recommend Strongest Signal Mode since your Wallflower can jump between networks and get confused by other 2.4GHz devices (cell phones, cordless phones, etc.)

  **NOTE ON SSID NAMES:** Wallflower's restrict the SSID names to only upper and lower case letters, numbers and the symbols '-', '_', and '+'. SSID names are case sensitive and may not contain spaces.

- **Enable/Disable Encryption:** This option enables or disables WEP encryption.
- **Encryption Key:** Wallflower supports only hexadeciamal keys and does not support passphrases. Legal charaautomatically cters are 0-9 and A-F. The length of the encryption key (40- or 128-bit) is determined by the length of the hexadecimal key entered in the text box- more than 10 characters is considered 128-bit.

## *Troubleshooting*

**PROBLEM**

**Wallflower fails to connect to unencrypted WiFi network.**

**CAUSE:**

When the Wallflower first attempts to connect to a WiFi network, it searches for the strongest WiFi signal it can find. In some cases the Wallflower can get confused by other WiFi networks or other 2.4GHz devices (including cell phones, cordless phones and microwave ovens).

**SOULUTION:**

There are 2 solutions:

- Use Ethernet configuration and chose a specific WiFi network name from the WiFi settings menu.
- Use "Known SSID Mode" as described above.

**PROBLEM**

**The Wallflower seems to have an IP address, but I cannot connect to it.**

**CAUSES/SOLUTIONS:**

1. IP address/network mismatch between Wallflower and PC/Mac.

Solution: Check your IP address settings and make sure your PC/Mac is on the same IP network. For example, if the Wallflower is on IP address 192.168.0.140, then your PC should also be on 192.168.0.x (e.g. 192.168.0.5)

2. WiFi network mismatch between Wallflower and PC/Mac.

Solution: Check your PC/Macs WiFi network SSID and make sure it matches that of the Wallflower (shown at boot time).

# 4 Moving Content to Your Wallflower

This chapter describes how to transfer content to your Wallflower via the Ethernet or WiFi connection. Please refer the QuickStart Guide if you just want to get going as quickly as possible.

## Many Ways to Move Your Stuff

There are several methods of moving images, movies and sounds to your Wallflower:

- **Drag-and-Drop File Sharing.** This is the primary way to get content to a Wallflower connected to your local LAN. It takes advantage of software built into Windows, Mac OS X and Linux that makes a Wallflower appear as a local file folder or hard drive.
- **Email Download.** Your Wallflower can receive (and send) email with media attached. Please see "Using Email Features" for more information.
- **Web Download.** Your Wallflower can download content directly from websites. Please see "Using Internet Download" for more information.
- **Secure Copy Protocol.** This advanced method allows you to push content to a Wallflower anywhere on your local network, or the internet.
- **USB Device Upload.** You Wallflower can automatically copy files found on attached USB devices such as Flash card readers, jump drives and mass storage compatible cameras.

This chapter will discuss Drag-and-Drop, USB devices and Secure Copy Protocol. Later chapters will discuss email and web download capability.

## Setting Up Drag-and-Drop Transfer

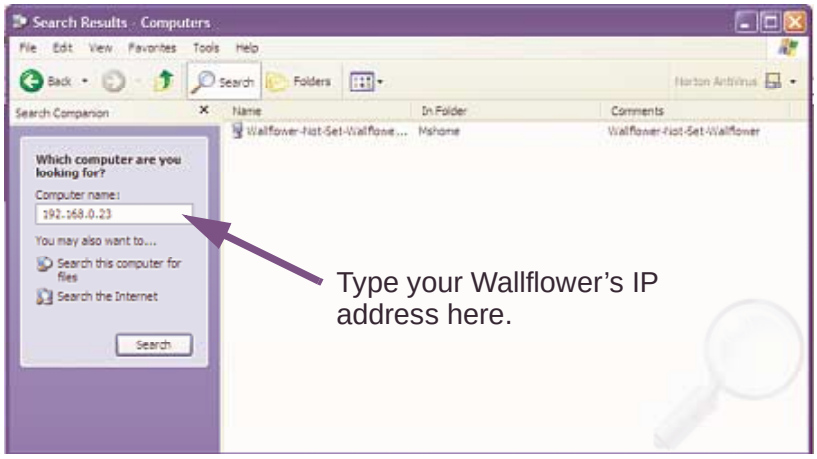
Once Drag-and-Drop is set up, your Wallflower will look and act like a hard drive directly connected to your computer. You can cut-and-paste from websites, or e-mails and paste the files directly into the Wallflower folder. You can even use programs such as Photoshop to modify images on your Wallflower directly; there is no need to copy them to your PC first.

The following sections show how to get drag-and-drop set up for PCs and Macs. Instructions for Linux users can be found on our website.

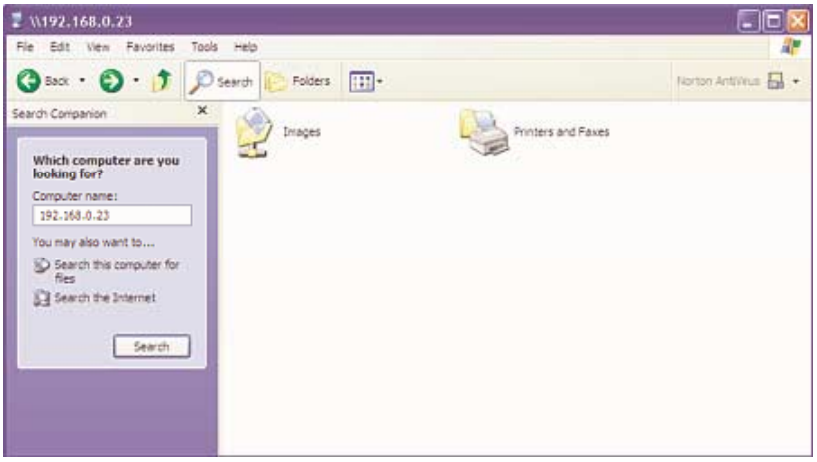
**WINDOWS XP SETUP**

1. Open "My Network Places" by clicking Start->My Network Places. Your Wallflower should appear if your Microsoft network name is “MSHOME” (the default in Windows XP). If not, proceed to step 2.

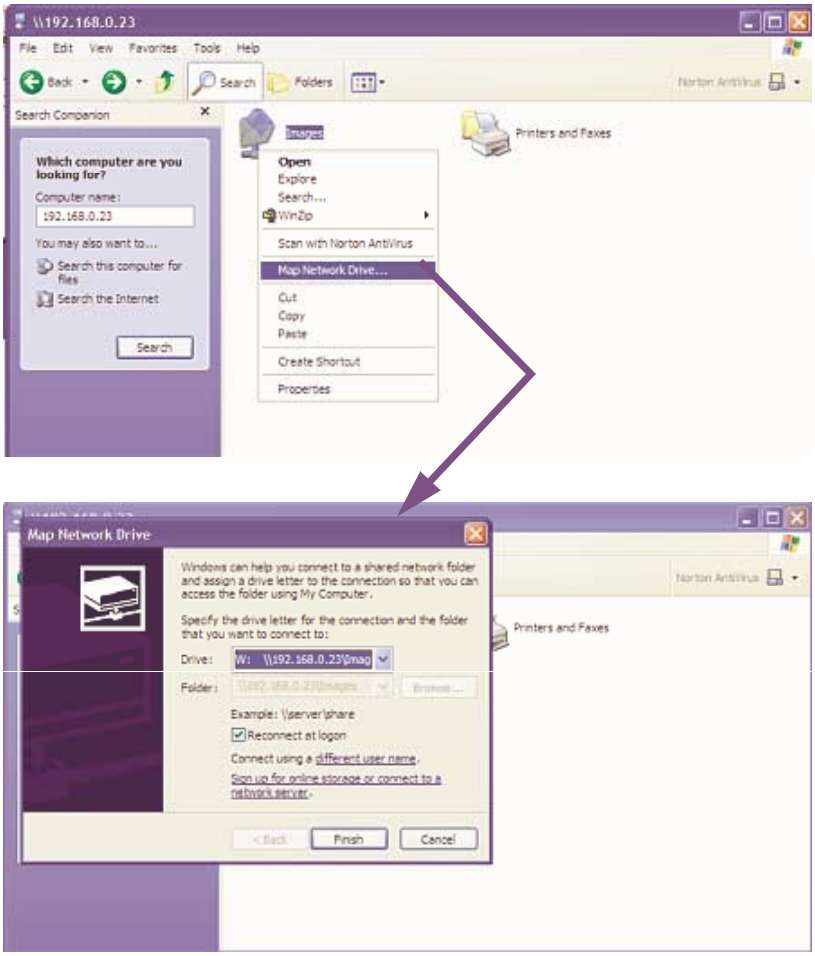
2. Click on the Search icon. In the box that says "Computer Name:" enter the IP address of your Wallflower. After a few seconds, your Wallflower will appear on the right.



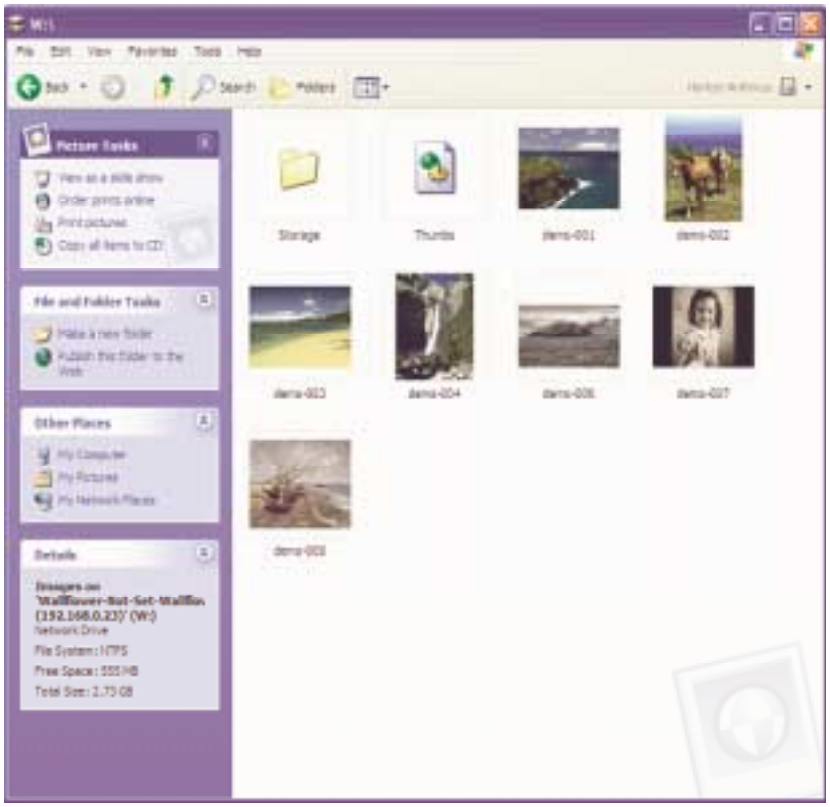

3. Double click your Wallflower's icon and a folder named "Images" will appear. It is into this folder that you will drag and drop images, music and videos for the Wallflower to display. (Ignore the “Printers and Faxes” icon, this is something Windows puts in.).




4. To make this folder permanently available in Windows, right click on it, then select "Map Network Drive". You will be given a choice of drive letter. We suggest something easy to remember like "W:".



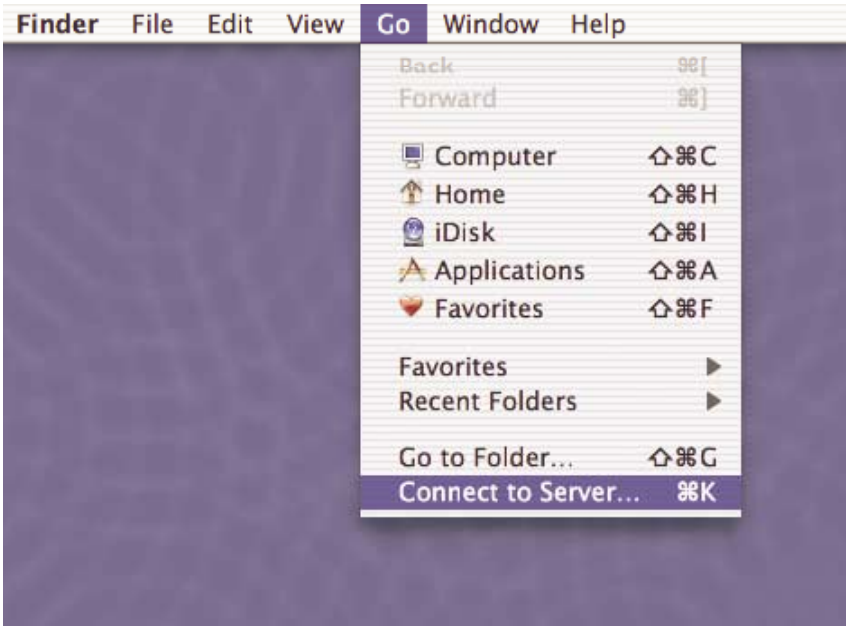

5. Now your "W" drive is the Wallflower. Open up the folder (Start->My Computer then click on the Wallflower folder) and have a look. If you have selected “Thumbnail View” for this folder, it will look like the screen shot below.



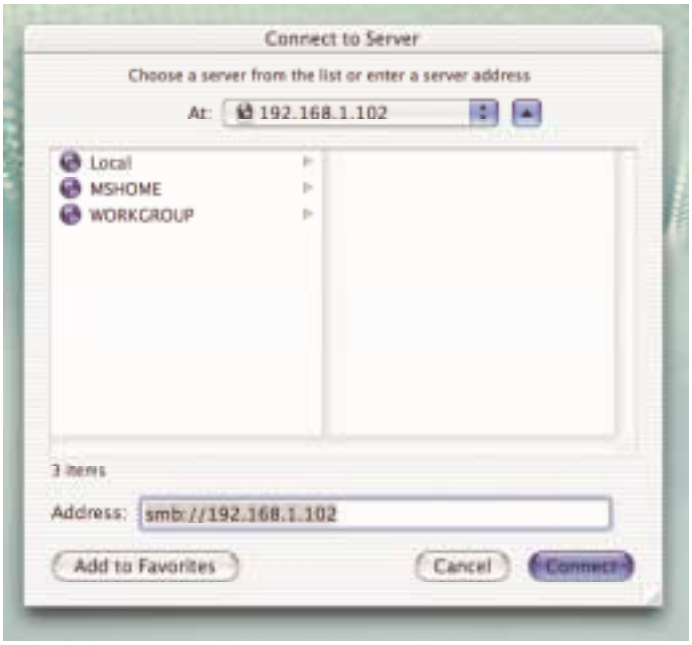
6. Now you can add your own pictures and delete our demo pictures. Just drag-and-drop or cut-and-paste from any location (other folders, e-mails, web pages, etc.). Your photos will appear shortly on your Wallflower.

**MAC OS X SETUP**

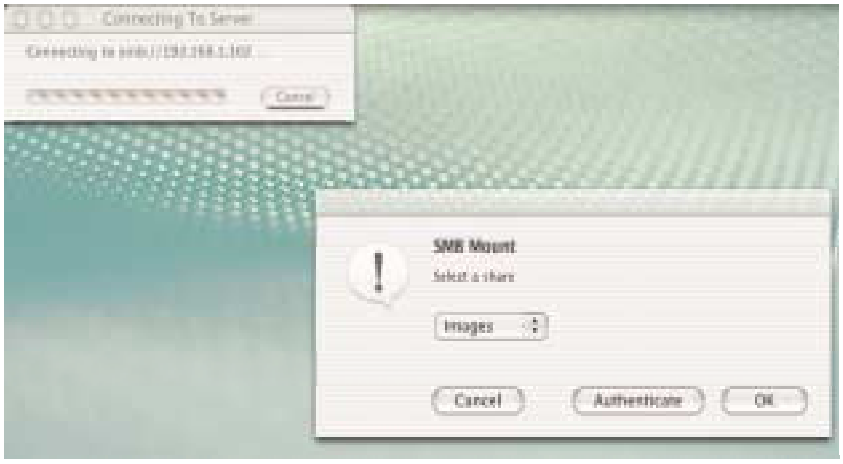
1. On the Finder menu, select “Go” then “Connect to Server”.



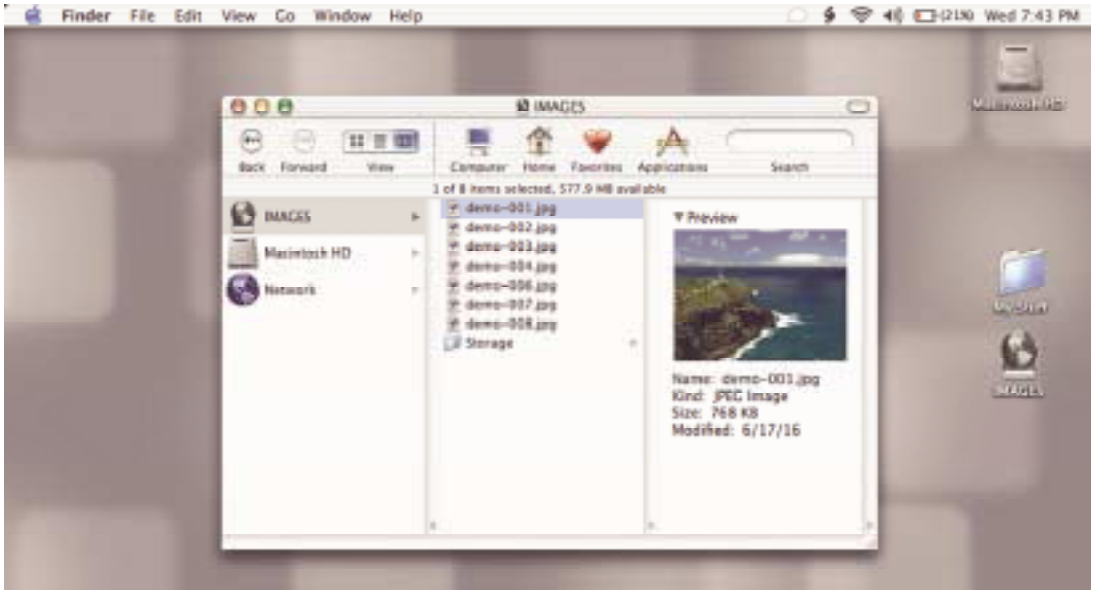
2. Enter your Wallflower's IP address in the "Address" box. You must preceed the address with `smb://` as shown below. depends on your network.) Then click "Connect"..




3. After a few moments you will see a new popup menu asking which share you want to mount (see below). Select "Images". You may be presented with a username/password screen. You can enter anything in this screen (or nothing) then hit Enter. The Wallflower does not currently use passwords.




4. Your Wallflower should now appear as a drive named Images on the right side of your screen.




5. Now you can add your own pictures and delete our demo pictures. Just drag-and-drop or cut-and-paste from any location (other folders, e-mails, web pages, etc.). Your photos will appear shortly on your Wallflower.

## Changing the Workgroup Name

By default, your Wallflower is assigned to the Windows Workgroup “MSHOME” (which is the Windows XP default). You can change this setting from the System Naming page in the web configuration menus.

## Changing File Server Security

You can limit access to your shared file area by enabling security on the File Server. Directions:

1. From the web interface, select Setup then Security Settings
2. From the left hand menu, select File Server
3. You can enable/disable security by clicking on the checkbox as shown below, then clicking “Submit”
4. You can add/delete users once you have enabled security.

## Using Secure Copy Protocol

Advanced users may wish to make use of the Secure Copy Protocol (SCP) to move content to their Wallflower.  SCP is similar in many ways to FTP, but it is more secure.

To use SCP you will need three things: the username/password combination to transfer files, the IP address of the Wallflower and the target folder/directory for the transferred files. This information is in the table below.

| Parameter | Value |
|---|---|
| SCP Username | mywallflower |
| SCP Password | The numerical portion of your serial number |
| Target Directory | /home/wfclient/images |

**SCP AND WINDOWS XP**

Windows XP does not include an SCP client so you will need to install one. We recommend WinSCP (search on Google for “WinSCP”).

**SCP AND MAC OS X**

Mac OS X users can either install a graphical SCP client (once again, “Google” for one that strikes your fancy), or use command line SCP from a Terminal Window:

1. Start a Terminal Window session.
2. Change directories to where your content is located.
3. Type: `ssh file.jpg wfclient@192.168.0.140:/home/wfclient/images`

   In the example above, replace “file.jpg” with the file you wish to transfer and the “192.168.0.140” with your IP address.

   If you are prompted to accept the “fingerprint” or key, type yes.

4. You will be prompted for the username/password. Use the values above (unless you have changed them).

## *Using USB Devices*

Your Wallflower can automatically upload content from USB devices attached to either of the USB ports found on the back of the system. Simply plug in the device, and the Wallflower will copy all of the media to an album named “USB-<date>” where date is today’s date[1].

The Wallflower recognizes any USB Mass Storage compatible device. This includes Flash card readers, jump drives and most cameras (Sony cameras are a notable exception).

1. If you do this more than once a day, the album will have an additional number at the end of the name. For example: USB-4-4-2004-1.

# 5 Media Playback

**Formats, Play Order, Albums and Titling**

The chapter describes what media are supported, how media playback works and how it can be controlled.

## Supported Formats

The following media formats are supported as of version 2.1.x of the Wallflower Plus software:

- **Images:** JPEG, BMP, GIF, TIFF, PCX and PNG.
- **Movies:** MPEG-1, MPEG-2, DiVX, QuickTime, most AVI formats (depends on the codec), some MPEG-4 (depends on the tool used to create the file). Windows Media not supported.
- **Audio:** MP3. Windows Media files not supported.

Future upgrades may support additional formats.

## Independent Mode Playback

Your Wallflower has two basic playback modes: Independent and Scripted. In Independent mode, the Wallflower builds its own playlists based on the albums you have created. In Scripted mode, you supply a playlist file and the Wallflower plays only what is in the playlist.

### INDEPENDENT PLAYLISTS

In Independent mode, your Wallflower builds its playlist from all *enabled* albums on the system. An album is nothing more than a subdirectory one level below the Images directory. Enabling/Disabling albums is covered below.

You can set the Wallflower to buld its Independent playlist alphabetically or using random shuffle. In both cases, content is played in album order. In other words, if you have chosen random shuffle and have two albums named “A” and “B”, then the content in one album will be played randomly, then the content in the other folder will be played randomly but the content of album “A” and album “B” will not be intermixed.

The point above is very important to understand, especially if you have seperated MP3s and images. ***If you have a directory full of MP3s without any images, there will be nothing on the screen while the MP3s play***.

**NOTE:** Your Wallflower only looks for playable files in the main Image folder and one level of folder (directory) below the main Image folder. If you have placed content more than one folder below the main Images directory, this content will be *ignored*.

For example, if you have created a folder called “1999” in the main images directory and a folder in “1999” called “Thanksgiving” then all the content in “1999” will be played, but the content in “Thanksgiving” *will not be.*

### INDEPENDENT MODE PLAYBACK ALGORITHM

The Wallflower uses the following algorithm each time though its media dispatch loop:

1. The Wallflower attempts to play content at the head of the list (if alphabetical then the next file alphabetically).
2. If the content is an image file and another image file is showing, then the next image is displayed. If a movie is playing, then the system waits until the movie is complete before showing the image.
3. If the content is music and no other music is being played, then the new music file is played. If another song is already playing, then the new song is put on hold (until the previous song completes) and the Wallflower moves on to the next item in the playlist.

While this may seem a bit complicated, in practice it really isn’t. Let’s assume you have 4 photos, a 5 minute song and a 2 minute video in an album. Alphabetically, the song (“asong.mp3”) comes before the movie (“mymovie.mpeg”.) Here’s what will happen:

- The Wallflower will start playing “asong.mp3” and start displaying your 4 photos. The photos will continue to loop until asong.mp3 completes.
- Once asong.mp3 completes, your Wallflower will play “mymovie.mpeg”. When that is over, the system will move to the next album.

Situations will arise where there are “holes” in the Wallflower’s ability to schedule content. For example, a song may end in the middle of an images flip time. In such cases, the Wallflower may insert additional music (if it will fit) or it may allow some “dead air”. In any case, if you want precise control over scheduling, please see script mode, below.

## Scrited Mode Playback

In scripted mode, your Wallflower will play only what you want it to play and nothing more. This mode is very handy for putting together narrated slideshows, music and picture playlists, etc.

Script files must be stored in the Images/scripts album (subdirectory) and must have a .scr extension. They can be created with any text editor (like Notepad), or they can be created with the simple script editor built in to the web interface.

**SCRIPT SYNTAX**

The script file is just a text list of media to be played in the order that it will be played. Images can have an optional time associated with them. All sound/video media will play to completion.

***Image Entries***

Image entries use the following general syntax:

```
<album>/<filename> [for]/[wait] [1-999] [seconds]
```

That’s probably meaningless to most, so here’s some practical examples:

```
kids/johnny.jpg for 4 seconds
```

This plays the photo johnny.jpg in album “kids” for 4 seconds.

```
space/hubble1.jpg wait
```

This plays the photo hubble1.jpg in album “space” until the currently playing audio file (specified earlier in the script) has completed.

```
space/hubble1.jpg
```

This plays the same image but for the duration of the flip time set through the web browser.

### Audio and Video Entries

There is only one syntax for audio/video entries:

```
<album>/<filename>
```

For example, to play sousa.mp3 in album “marching”:

```
marching/sousa.mp3
```

To play the movie “springsale.avi” in album “videos”:

```
videos/springsale.avi
```

### Combining Entries

Here’s an example of combined entries:

```
narration1.mp3
image1a.jpg for 5 seconds
image1b.jpg for 5 seconds
# The next image will play until narration1.mp3 completes.
# If it was a 20 second mp3, then image1c
# will play for 10 seconds
image1c.jpg wait
```

#### Script Comments

Any line that starts with a ‘#’ is ignored. Leading whitespace is also ignored.

#### Missing Files

If a script references a missing file then that file will be ignored *even if it is subsequently added to the system*. You will need to enter-exit-enter script mode to get the new file recongized.

#### Script Checking

If you edit a script using the webbrowser you can get a syntax error and missing file report.

## Albums

Your Wallflower considers all folders (subdirectories) in the main Images directory to be Albums. Playback of of Albums can be independently enabled and disabled through the web interface.

By using Albums, you can organize your multimedia content and selectively play back only what you want at a given time. For example, you might create an Album called “Thanksgiving” and then only enable the Album for Thanksgiving dinner.

### CREATING ALBUMS

1. Using either “My Computer” (Windows) or the Finder (OS X), open the folder or drive volume for your Wallflower.
2. Windows: Right click your mouse and select New->Folder. Enter an appropriate name (i.e. “Thanksgiving” for the above example).

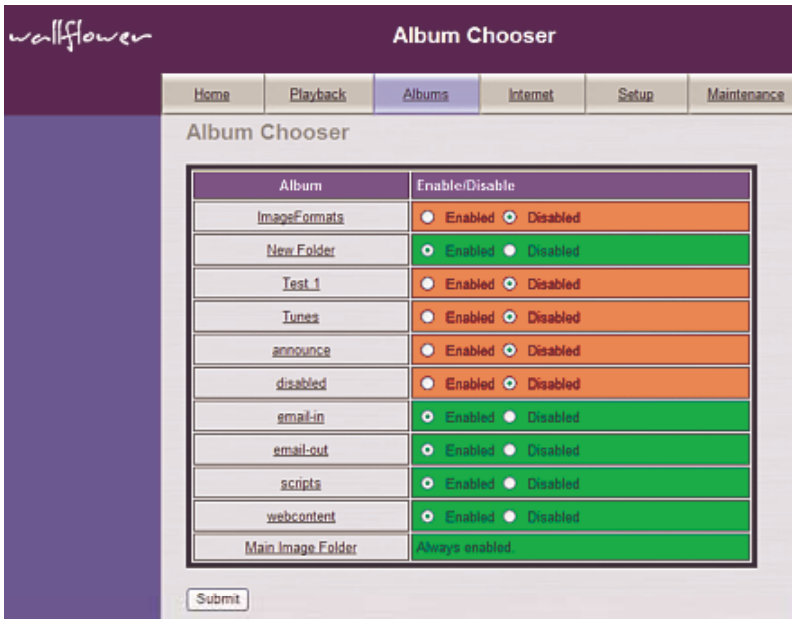
   OS X: <ctrl>-click your mouse and select New Folder. Rename the folder from “untitled folder” to something appropriate for your Album.

You can now copy content into this folder. It is enabled by default.

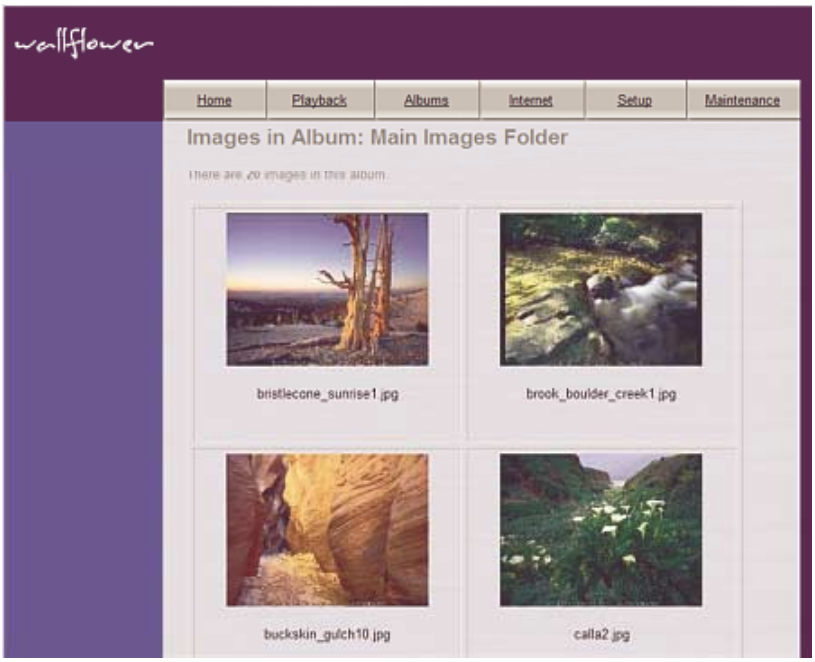
### ENABLING/DISABLING ALBUMS

Albums can be enabled/disabled through the web interface as follows:

1. Select Albums from the tab bar. You will see the image below.



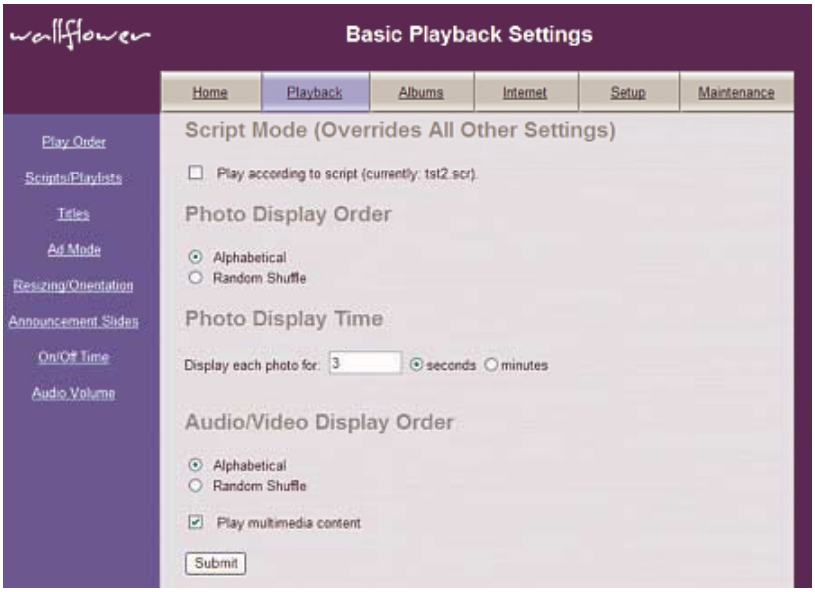
2. On this menu you can select which Albums to play. New albums are enabled by default. The Main Images folder cannot be disabled.
3. If you click on an Album name from the Album Chooser you will see thumbnails of the media in the folder.



## Controlling Playback Time (“Flip Time”)

Images are played for a specific amount of time called the “flip time”. The flip time is set on the Album and Timing Settings page (see below). The minimum flip time is currently 1 second and there is no upper limit.

**NOTE**: We do not recommend leaving images on the screen for more than 15 minutes at a time as this can cause burn-in to occur on your LCD panel. BURN-IN IS NOT COVERED BY YOUR WARRANTY.
.



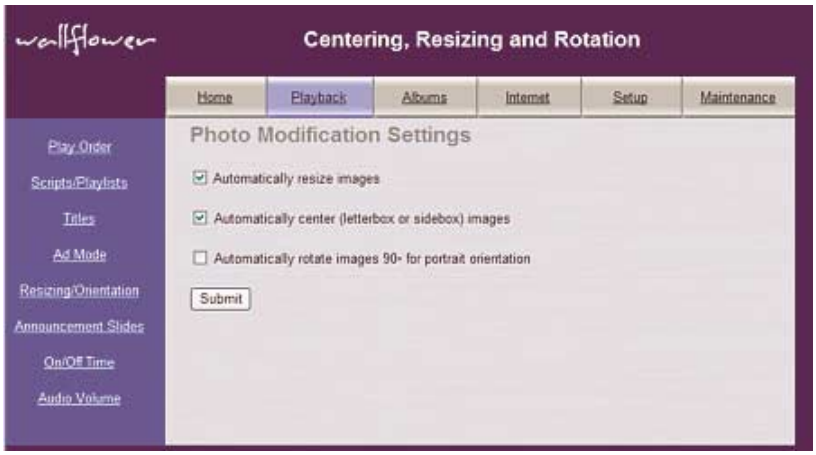
## Setting On/Off Time

Also in the Playback Settings page you will find the option to have the Wallflower blank its screen during certain periods of the day. The times entered must be in 24 hour time format.

**NOTE:** You can also turn off just the display by using the screen power button on the far right of the monitor control buttons (next to the LED).

## Screen Orientation and Resizing

On the Picture/Playback Options page you can control screen orientation, resizing and centering options.




**AUTOMATIC RESIZING**

When automatic resizing is selected your images will automatically be resized to the best resolution for the screen.

If you do not select automatic resizing, then the image will be displayed in it's native resolution and will either be cropped (if it is larger than the 1024x768 screen resolution) or matted (if it is smaller than 1024x768).

In most cases, you should leave auto-resizing turned on.

NOTE: Regardless of whether you have enabled resizing, your Wallflower always creates a resized copy of the image for it's own use. This copy is created the first time the Wallflower attempts to display the image and the process can take up to 15 seconds depending on the size of the original. While the Wallflower is creating this copy, some functions may work very slowly including

titling bars and the wb interface. This is normal and will not happen after the copy process is completed.

**AUTOMATIC CENTERING**

When automatic centering is turned on, images that do not fit the 4:3 aspect ratio of the screen will be automatically letterboxed or sideboxed with a black border to fit in the center of the screen.

For example, if one of your images is a panaroma with an aspact ration of 10:1 (say a 1000 pixel by 100 pixel image) then there will be black bands above and below the image. Similarly, portraits shown in landscape mode will have black bands on either side of the image.

With automatic centering turned off, your images will be “pinned” to the upper left corner of the screen.

In most cases, you should leave auto-centering on.

**PORTRAIT MODE**

If most of the images you want to display are portrait orientation, you should consider using portrait mode. In portrait mode, all images are rotated 90 degrees before being displayed.

## *Titles*

Your Wallflower can display titles with information about MP3 and JPEG files being played. Titling options can be found on the Titles page, shown below.

wallflower
Titles
Home
Playback
Albums
Internet
Setup
Maintenance
Play Order
Scripts/Playlists
Titles
Ad Mode
Resizing/Orientation
Announcement Slides
On/Off Time
Audio Volume
Titling Settings
Show MP3 Artist/Title
Show Image Titles
Show Filename When Title Not Found
Submit
Title information comes from a text file with the same name as the image file being displayed. For example, if you want a title for an image named "johns_birthday.jpg" then put a text file named "johns_birthday.txt" with your title information in the same album. You can create text files with most text editors including Word, Wordpad and Notepad. Just be sure to save as text (sometimes called ASCII text).
MP3 file title information comes from the MP3 tags embedded in the file.

**MP3 ARTIST/TITLE**

With this option selected, your Wallflower will show the artist and title of the MP3 file it has just started to play. The information will be shown at the top of the screen for about 10 seconds after the file starts playing.

If the artist/title information is missing or incorrect in the MP3 file, then the title will indicate this.

**IMAGE TITLES**

There are two types of image titles: informational titles and filename titles. To create and informational title, you need to create a file with the information you want displayed in the same album as the photo. This file must be a text file with the extension ".txt".

For example, if you want a title for an image named "johns_birthday.jpg" then put a text file named "johns_birthday.txt" with your title information in the same album. You can create text files with most text editors including Word, Wordpad and Notepad. Just be sure to save as text (sometimes called ASCII text).

Using the example above, if the file "johns_birthday.txt" had the line "Here's John's First Birthday, Look at the Cake on His Face!" then this text would display as a title for the first few seconds of the image display.

You also have the option of just showing the filename if an information file is not found.

## *Notes on Video Performance*

Your Wallflower will perform best on video files when they are limited in certain (reasonable) ways. Video files have several parameters which can affect whether the Wallflower can display them without skips or jerkiness:

- Width/Height: Videos at or beyond 640x480 resolution may start to show some frame dropping (jerkiness). To put this in perspective, standard definition broadcast TV's resolution is 460x360. So even at 640x480 you're beyond standard definition TV.
- Framerate: This is how many frames per second are shown in the movie. Typically it is 29.97 and sometimes 24. The human eye can start to see jerkiness of flicker below about 20 frames per second.
- Bitrate: This is a parameter used by the program that generated to video file to control how much compression is used in the file.
- Compression/Quality: Similar to the parameter above, the creator of the file can control how much video quality they are willing to give up in exchange for performance and size.

There are so many variables involved (we didn't even get into formats such as MPEG-1 vs. MPEG-2 vs. DiVX vs. QuickTime) that it is almost impossible to give hard-and-fast rules as to what settings to use. We can say that we have test videos at 352x240 resolution (MPEG-1, bitrate 1.15Mbps, 29.97 framerate)

that look as good as DVD. We've also seen videos *with the same exact settings*, that look horrible. It's really up to you to experiment (and let us know if you hit a combination that works every time!)

# 6 Internet Features

## Web Download, Email and RSS News Feeds

Your Wallflower is capable of sending and receiving content over the internet several different ways. This chapter covers the setup of these services.

### Web Download

The web download capability allows your Wallflower to periodically download content from websites. Currently, download of image, MP3 and video files is supported. Other content, including standard HTML pages, can be downloaded, however the contents of these pages is not displayed.

The web download configuration page can be reached by clicking on the Internet tab on the web interface and then selecting "Web Content Download".

**ENTERING URLS TO DOWNLOAD**

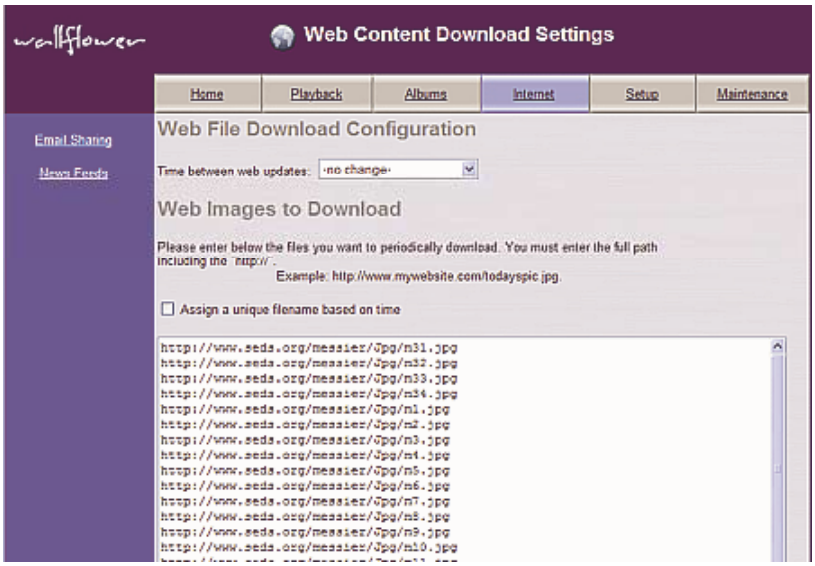
To enter URLs ("Uniform Resource Locators" better known as web addresses), simply type the URL into the text box. URLs must be complete and include the "http://" at the beginning.

Example:

http://www.mysite.com/photos/kids_swimming.jpeg

There is no limit to how many URLs you can enter.

Downloaded content is stored in the Album "webcontent".




**SELECTING UNIQUE FILENAMES**

By default, when a photo is downloaded from a website, it is given the same name as it originally had. For example, fetching the URL:

http://www.mysite.com/photos/kids_swimming.jpeg

Would result in a file named “kids_swimming.jpeg” in the “webcontent” album. This is exactly the behavior you would expect, especially when downloading changing content such as weather maps (after all, there’s no need to see the weather from yesterday or the day before.)

Sometimes, however, you might want a unique filename assigned for every download. A good example is using a webcam where you would want to store every snapshot with a different name. To enable unique filenames, simply click the unique filename checkbox. Each file will then get a unique filename, based on the time of download.

**REDIRECTED DOWNLOAD**

You can supply a list of URLs to download in a file on a website that the Wallflower can access. For example, if you have the following URL in the Wallflower’s URL download list:

```
http://www.myserver.com/wallflower/morestuff.wdl
```

And the file “morestuff.wdl” has the following entries:

```
http://www.server1.com/pic1.jpg
http://www.server2.com/vid3.mov
```

Then the Wallflower will append the entries in the morestuff.wdl file automatically to its download list. (Note that the redirected entries in morestuff.wdl are not themselves added permanently to the main URL download file.)

You can use redirected downloads to keep a central list of images you want multiple Wallflowers to download. For example, if you have a personal website, you could update your ".wdl" periodically and all your friends and family could get the latest images.

Redirected download files must always end in ".wdl" (lower case).

**SELECTING DOWNLOAD PERIOD**

The dropdown box for download period allows you to select how often web downloads occur. The maximum rate is once every 15 minute. The minimum is once per day.

**SITES USING AUTHENTICATION**

Sites using basic authentication (username/password) are not currently supported.

**ERROR REPORTING**

The results of each web download are stored in text files which you can view from the Maintenance pages on the web browser interface.

## *Email Overview*

Your Wallflower can both send and receive content via email. Content received via email is saved in the "email-in" album. Content you want automatically sent via email must be stored in the "email-out" album.

## *Receiving Email*

Your Wallflower can download email either from its own dedicated email account (the easiest method) or from a shared account (slightly more complicated). In this section we'll cover the setup of both.

**IMAP/POP3 PROTOCOLS**

Your Wallflower supports POP3 and IMAP email protocols. In order to use the email download capability, your email service must support one of these two protocols.

**Note About Free Email Accounts:** Popular free email accounts such as Hotmail and Yahoo, do not support the IMAP or POP3 protocols. Therefore, these accounts cannot be used with your Wallflower. However, Fastmail (www.fastmail.fm) does provide free basic IMAP accounts as do several other vendors.

**BASIC INFORMATION YOU'LL NEED FOR SETUP**

You'll need the following information to set up email download for your Wallflower.

- **Incoming Mail Server**: This is typically the system name from which your email will be fetched. Examples: fastmail.fm, smtp.sbcglobal.net.
- **Username**: This is the username you use to access your email account. It is sometimes (but not always) your email address.
- **Password**: This is the password you use to access your email account.
- **Email Protocol:** POP3 or IMAP.

**DELETING EMAIL AFTER DOWNLOAD**

If you select this option, received emails will be deleted from the mail server after download. If the Wallflower is the only user of this account then select this option.

If you are sharing the email account between a Wallflower and other users, you should leave this unchecked so that the Wallflower does not automatically clean up the email account.

**SECURITY PHRASE**

If you enter a security phrase, then only emails with this phrase in the subject line will be accepted by the Wallflower. You can use this feature for spam prevention. The security phrase much match exactly.

**VIRUSES**

Your Wallflower is immune from viruses as it never executes anything received via email.

**ERROR REPORTING**

The results of each email download are stored in text files which you can open in Microsoft Word. In the main Images directory you will find a file called email-log.txt and in the “email-in” album you will find a file called “log.txt”. If you are experiencing problems with email download, have a look at these files for an indication of the cause of the problem.

## *Sending Email*

Your Wallflower can send photos or other content via email to a distribution list. You can use this feature to update other Wallflowers or family and friends when you add new images to your system.

**EMAIL OUT ALBUM**

Photos or other content that you wish to send must be put in the “email-out” album. Each item will be sent only once, regardless of how long it is in the email-out album.

**SETTING UP OUTGOING EMAIL**

Unlike incoming email, outgoing email does not use an external email account. All the Wallflower needs is an internet connection to send email.

The following settings are available for outgoing email:

- **Outgoing Email Name**: This is the name that will appear on the outgoing email. Your recipients will see this as the “From:” entry in the email.
- **Outgoing Subject:** The contents of this field will be used as the subject for emails sent by the Wallflower. It can be any text value such as “Pics from Steve!”. If you are using the email out feature to synchronize with other Wallflowers, you might want to use this field as a common security phrase.
- **Distribution List:** This is the list of addresses to which outgoing emails will be sent. One entry per line.

## *Scrolling News Feeds (RSS)*

Your Wallflower can display scrolling news feeds (like CNN’s news crawler) across the bottom of the screen while images are showing. Go to the RSS page under “Internet” on your web browser for more information.

NOTE: News feeds do not show during videos.

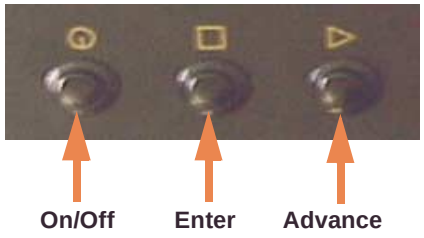
# 7 Other Features and Settings

**Buttons, Security and Maintenance Pages**

This chapter covers a variety of topics not found in other chapters.

## Advance/Enter Buttons

The Advance/Enter buttons are found on the op of the enclosure as shown in the photo below.




These buttons can be programmed for several features including volume up/down, advance image, rewind, etc. Please go to "Setup" then click "Buttons" through the web user interface.

**DISPLAYING SYSTEM STATUS**

One handy feature that is enabled by default via the buttons is Status Overlay. If you hold down the advance and enter button simultaneously, a small box will

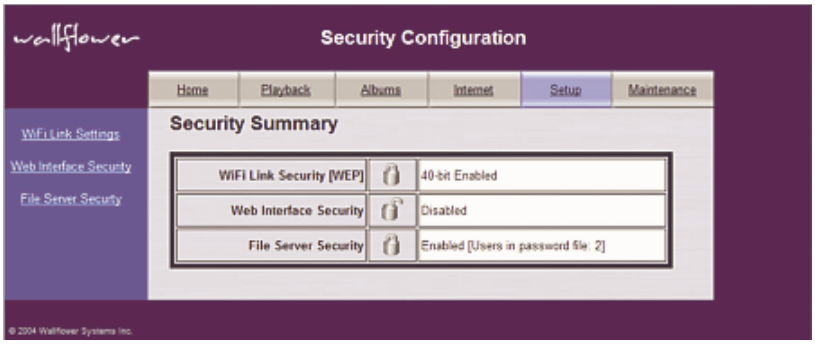
pop on the screen with information about your system including IP address, network name and software revision. Clicking the buttons simultaneously again makes the box go away.

## Security Settings

You can enable username and password checking on both the web interface and on the file server (windows file sharing). Through the web browser, go to “Setup” then click on “security”.

**SECURITY OVERVIEW PAGE**

The Security Overview page is shown below. This gives you a high level view of your security settings.




**WEB INTERFACE SECURITY**

To enable web interface security, clcik on “Web Interface Security” then select “Enable Web Server Security” and click submit. You will now be able to add/delete users (up to a maximimum of 2 for the non-Business Edition version of the Wallflower 2).

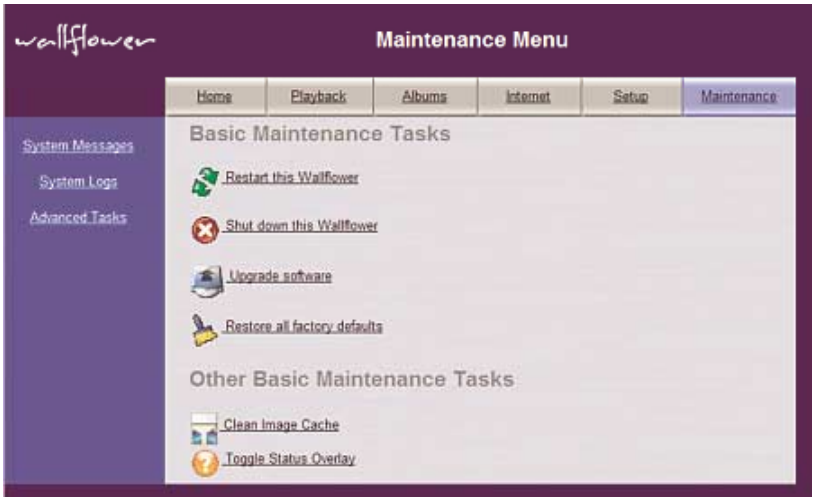
**NOTE:** As soon as you enable security, a user named “admin” is added with a password “admin”. You should change these as soon as possible. DO NOT LOSE YOUR PASSWORD.

**FILE SERVER SECURITY**

To enable file server security, clcik on “File Server Security” then select “Enable File Server Security” and click submit. You will now be able to add/delete users (up to a maximimum of 2 for the non-Business Edition version of the Wallflower 2).

## Maintenance Pages

By clicking on the Maintenance tab through the web browser you can get to the Maintenance screen below.




**MAINTENANCE TASKS**

**Restart:** Clicking this link will reboot your Wallflower.

**Shut Down:** Clicking this link will power off your Wallflower.

**Upgrade Software:** Clicking this link upgrade your system software (see Software Upgrades, below).

**Restore All Factory Defaults:** Clicking this link will restore your system to out-of-the box settings (your content will not be changed)

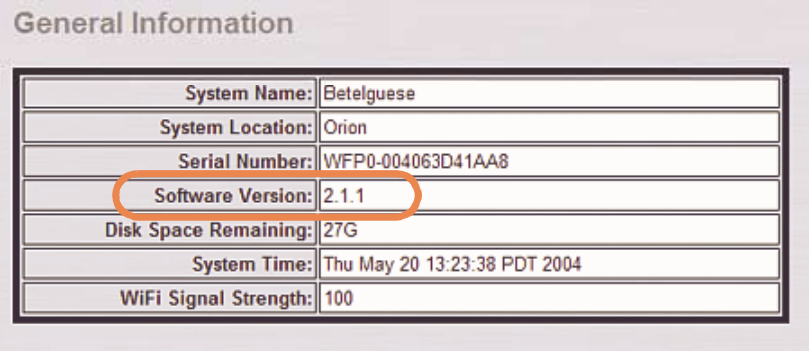
**Clean Image Cache:** Clicking this link will delete all resized and rotated temporary files your system has created. You should only do this if you are seeing unusually resized or rotated images. It doesn't hurt anything to click it, but all your cached images will need to be recreated and your system will run slow for a while.

**Toggle Status Overlay:** Clicking this will turn on/off the status overlay box described above.

## Software Upgrades

Your Wallflower's software can be easily upgraded as follows:

1. Check which version of software you are running by going to the main homepage of your web interface and looking for the entry.




2. Check the Wallflower on-line support pages for a software update that is numerically greater than this version (in the case of the above image you would be looking for an upgrade to version 2.1.2 or higher). **MAKE SURE YOU DOWNLOAD THE FILE FOR YOUR WALLFLOWER MODEL** (i.e. don't try to install Wallflower Plus or Wallflower Classic upgrades on your Wallflower 2).
3. Download the upgrade file. When the download is complete make sure the size is close to that shown on the web site. If not, you may not have gotten the whole package.
4. Copy the file to the main Images directory on your Wallflower.
5. Click on "Upgrade" on the Maintenance page.
6. Watch your Wallflower's screen. It should show several informational messages as it goes through the upgrade. When it is done, it will reboot. Be patient, this can take several minutes depending on the size of the upgrade.

## Log Files

Several operations on your Wallflower product log files which can help you (or us) debug problems. For example, both the email and web download operations save messages that are viewable if there are problems.

To see the log files, click on the Maintenance tab, then click on System Logs.

## Advanced Maintenance Functions

There are several function under Advanced Maintenance. Do not fool around with these unless directed to by Wallflower personnel or if directed to from our website. We mean it!

## Remote Control and Advanced Scripting

The Wallflower 2 for Business supports advanced remote control and scripting capabilities. Please contact us if you need more information.